

CLAIMS:

1. A luminaire comprising:
a reflector body (9) with a reflecting portion (2) provided with a coating (5)
based on an inorganic sol-gel system,
the coating (5) comprising a light-transmitting binder (11),
5 the light-transmitting binder (11) comprising light-reflecting particles (10),
the light-reflecting particles (10) being chosen from a group formed by
titanium oxide, aluminum oxide, halophosphates, calcium pyrophosphate, and strontium
pyrophosphate, and
the light-reflecting particles (10) being surrounded by a skin layer (14) for
10 improving the reflection of the coating (5).
2. A luminaire as claimed in claim 1, characterized in that the light-transmitting
binder (11) comprises silicon oxide particles (20).
- 15 3. A luminaire as claimed in claim 2, characterized in that the size of the silicon
oxide particles (20) ranges from 10 to 50 nm.
4. A luminaire as claimed in claim 1 or 2, characterized in that the inorganic sol-
gel system is a silica-based sol-gel system.
20
5. A luminaire as claimed in claim 1 or 2, characterized in that the skin layer (14)
comprises silicon oxide or aluminum oxide.
6. A luminaire as claimed in claim 1 or 2, characterized in that the size of the
25 light-reflecting particles (10) ranges from 100 to 500 nm.
7. A luminaire as claimed in claim 1 or 2, characterized in that the thickness of
the coating (5) ranges from 1 to 200 μm .

8. A luminaire as claimed in claim 7, characterized in that the thickness of the coating (5) ranges from 10 to 100 μm .
9. A luminaire as claimed in claim 1 or 2, characterized in that the reflecting
5 portion (2) of the reflector body (9) comprises a metal.
10. A luminaire as claimed in claim 9, characterized in that the metal comprises aluminum.
- 10 11. A luminaire as claimed in claim 1 or 2, characterized in that the light-transmitting binder (11) comprises a stabilizing agent.